



United States Department of the Interior

OFFICE OF THE SECRETARY
WASHINGTON, D.C. 20240

OCT 17 1988

Honorable William E. Evans
Under Secretary for Oceans
and Atmosphere
U.S. Department of Commerce
Washington, D.C. 20230

Dear Mr. Evans:

The Department of the Interior (DOI) endorses the recommendations submitted by the U.S. Geological Survey (USGS) to the National Oceanic and Atmospheric Administration for its "Study for Advanced Civil Earth Remote Sensing System." We have reviewed these recommendations (copy enclosed) that were sent to Mr. Thomas K. Pyke, Jr., Assistant Administrator for Satellite and Information Services. The DOI supports the overall concept described in these recommendations. However, to meet the data requirements of certain DOI bureaus, the Department recommends that the following additional capabilities be assessed:

1. Spectral Bands -- From DOI's perspective, the suggested short-wave infrared spectral band is highly desirable for mineralogical and geobotanical analysis, and for differentiating snow, ice, and clouds.
2. Ground Spatial Resolution -- While 10-meter spatial resolution is sufficient for many DOI applications, and provides an adequate swath width at reasonable data transmission rates, 5-meter resolution is desired for some DOI mapping and resource inventory applications. The study should evaluate the feasibility and system impact of acquiring 5-meter data for selected areas.
3. Orbit -- The descending node equatorial crossing time should not be earlier than 0900. This would be consistent with the nominal equatorial crossing times of Landsats 1-5 and would reduce shadow effects in mountainous terrain typical of lands managed by several DOI bureaus.

DOI bureaus and offices have developed many uses for remotely sensed data from civil satellites such as Landsat and SPOT, and look forward to using data from an advanced system as proposed by the USGS. Representatives from the USGS and other DOI bureaus are prepared to provide additional detail on the recommended system.

Sincerely,

s/James Ziglar

Assistant Secretary
for Water and Science

Enclosure

Copy to: Mr. Thomas N. Pyke, Jr.
National Oceanic and
Atmospheric Administration

Mr. Joseph L. Gray
U.S. Department of Commerce